fuscous on scutellum; clypeus produced, but not so excessively as in some species, exceedingly shiny, very sparsely punctured; sides of face covered with white hair; malar space broader than long; antennæ black; front densely and minutely punctured; mesothorax with dense strong punctures, but shining; postscutellum covered with white tomentum and white hair in scutello-mesothoracic suture; area of metathorax broad, with a raised cancellate sculpture; tegulæ dark reddish. Wings reddish, stigma and nervures rather dilute brown; second s.m. very large; third s.m. receiving the recurrent nervures near apex and base; second and third transverso-cubital straight. Legs black, the tarsi ferruginous at apex. Abdomen black, the hind margins of the segments broadly hyaline, rather sparsely beset with silvery hairs; dark parts of abdomen with much black hair.

The smallest known species of the genus; nearest to *T. productum*, but malar space shorter, and the sculpture of the thorax very different.

Hab. Hinterland of Benguella, Jan. 3, 1908 (*F. C. Wellman*).

Taken with other bees (*Cœliozys benguellensis* &c.) at a small patch of flowering Compositæ, *Othonna* and *Geigeria*. The hind legs are loaded with the deep orange pollen.

Bombus ephippiatus montezumæ, n. n.

Bombus laboriosus, Smith, Journ. of Entom. 1861, p. 153 (not of Fabricius, 1804).—Mexico.

LIV.—*On the Synonymy and Systematic Position of some Species of* Tabanidæ *described by Thunberg and Lichtenstein.* By Ernest E. Austen.

In a recent paper on the "Nomenclature of Diptera" Prof. Bezzi * has called attention to certain forgotten writings of C. P. Thunberg and A. A. H. Lichtenstein, and has also (*loc. cit.* p. 84) expressed his conviction that, as has already been done in the case of other orders of insects, "a permanent and immutable nomenclature can be established for the Diptera also, after all generic and specific names, proposed by all the older authors without exception, have been completely elucidated and interpreted." The following notes are

* Wien. Ent. Z. xxvii. Jahrg., Heft ii. & iii. (20th Feb., 1908) pp. 77–83.

offered in the hope of expediting, in however small a degree, the advent of so desirable a consummation.

Bezzi is not strictly correct in stating (*loc. cit.* p. 80) that the species of Tabanidæ described by Thunberg (Nov. Act. R. Soc. Sci. Upsal. ix. 1827, pp. 53–75) are "entirely wanting" from Kertész's 'Catalogus Tabanidarum' (1900), since *Tabanus ruber*, Thunb. (*loc. cit.* p. 56.—Habitat unknown), and *Tabanus triceps*, Thunb. (*loc. cit.* p. 59.—Cayenne and Brazil), are duly recorded by Kertész. The inclusion of these species, however, in view of the exclusion of all the others, is certainly remarkable.

Tanyglossa cingulata, Thunb. (*loc. cit.* p. 70, tab. i. fig. 8. —Cape of Good Hope), = *Pangonia angulata*, Fabr.

From Thunberg's description and figure, *Pangonia conjuncta*, Walk. (List Dipt. Ins. in Coll. Brit. Mus. i. (1848) p. 135.—S. Africa), would appear to be identical with *Tanyglossa pulcra*, Thunb. (*loc. cit.* p. 72, tab. i. fig. 9), which, however, is stated to be from Brazil.

Tanyglossa rostrata, Thunb. (*loc. cit.* p. 75, tab. i. fig. 13. —Cape of Good Hope), apparently = *Pangonia* (*Tabanus*) *rostrata*, Linn.

Tanyglossa obscura, Thunb. (*loc. cit.* p. 73, tab. i. fig. 10. —Locality not given), is a *Pangonia*, as stated by Bezzi—perhaps *P. rostrata*, Linn.

[*Tanyglossa deusta*, Thunb. (*loc. cit.* p. 68, tab. i. fig. 7.—Brazil), is not a Nemestrinid, as suggested by Bezzi, but = *Heterostylum rufum*, Olivier (fam. Bombylidæ).]

Tanyglossa æthiopica, Thunb. (*loc. cit.* p. 67, tab. i. fig. 6. —Cape of Good Hope).—Apparently this is the species previously (Mus. Nat. Acad. Upsal. Dissertationes, Pars 7 (1789) p. 91) described by Thunberg as *Tabanus æthiopicus* *. Be this as it may, there can be no doubt that it is a *Pangonia*, and not *P. rostrata*, L., as Bezzi believes, but *P.* (*Corizoneura*) *varicolor*, Wied. (Auss. Zw. Ins. i. (1828) p. 98: syn. *P. appendiculata*, Macq.). Wiedemann's name consequently becomes a synonym, and the species must henceforth be known as *Pangonia æthiopica*, Thunb.

Tanyglossa thoracica, Thunb. (*loc. cit.* p. 71.—Locality unknown), is a *Pangonia*, apparently allied to *P. angulata*, Fabr. If so, it must be from S. Africa.

According to Bezzi (*loc. cit.* p. 83, note 2), with the exception of *Mydas nitida*, none of the species of exotic Diptera

* Omitted by Bezzi, Wien. Ent. Z. xxvii. Jahrg., Heft ii. & iii. (Feb. 20th, 1908) p. 79.

described in Anton August Heinrich Lichtenstein's 'Catalogus'* have been noticed by Wiedemann or any other author. Bezzi (*loc. cit.* note 2) gives the number of the species under the genera under which they were described, but states that he has not yet seen the publication in question. This is not surprising, since, according to Sherborn (Ann. & Mag. Nat. Hist. ser. 7, vol. iii. 1899, p. 272), Lichtenstein's 'Catalogus' is "so rare that only two copies are known to exist, one in the British Museum and one in the University of Kiel." Lichtenstein's Tabanidæ were described as *Tabanus costalis* (*op. cit.* p. 213) and *Tabanus Hottentotus* and *T. charopus* (*ibid.* p. 214). The descriptions are exceedingly short, and since few dipterists are likely to be in a position to consult the originals, they are transcribed in their entirety below, with a note in each case on the systematic position of the species:—

"295. Tabanus striatus; n. 39 †. Item: Tabanus costalis; nobis. Taban. oculis æneis; ferrugineus, alis hyalinis costa flava. Habitat in Coromandel."

[Apparently a *Tabanus*, but precise species probably indeterminable.]

"304. Tabanus Hottentotus; nobis. Tabanus ater; thorace, & abdominis segmento tertio supra flavo macularis [*sic*]. Habitat ad Cap. bon. Spei. Haustellum longitudine capitis, alæ nigræ."

[Evidently a *Cadicera*, near, though apparently distinct from, *C.* (*Pangonia*) *chrysostigma*, Wied.]

"305. Tabanus charopus; nobis. Tabanus oculis fuscis, ater, lanugine alba, alis hyalinis. Habitat ad Cap. bon. Spei. Haustellum longitudine thoracis."

[Probably *Bombylius anatis*, Fabr., ♂.]

LV.—*The Missing Premolar of the Chiroptera.*

By Oldfield Thomas.

No bat has normally more than three premolars, above or below, and the question has naturally arisen as to which of the full mammalian set of four has disappeared in this group.

* 'Catalogus rerum naturalium rarissimarum Hamburgi . . . auctionis lege distrahendarum . . .' Sectio tertia [Insecta]. 8vo, Hamburg, 1796.

† The number under which *Tabanus striatus* was originally described by Fabricius, Ent. Syst. iv. 1794, p. 371.—E. E. A.